NWH Annual Report 2013 Urogynaecology and OASIS

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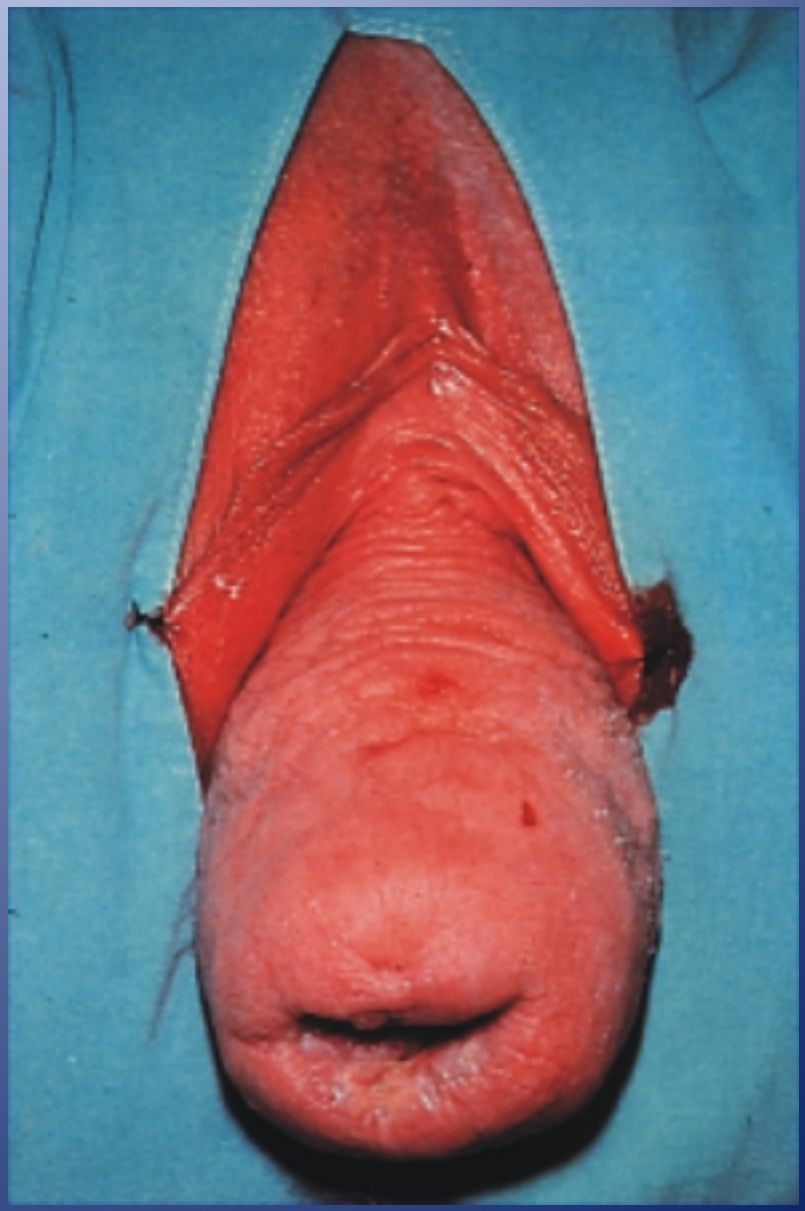
Urogynaecology



Mesh DownUnder

SHOUTING OUT
To ALL New Zealander's with Surgical Mesh complications. OR maybe you are considering a surgery with mesh…

Across the world people are working to raise awareness of the life altering terrible effects that surgical mesh complications can bring. As we speak there are thousands of cases coming to light of people that have had ongoing health problems since having mesh implanted.

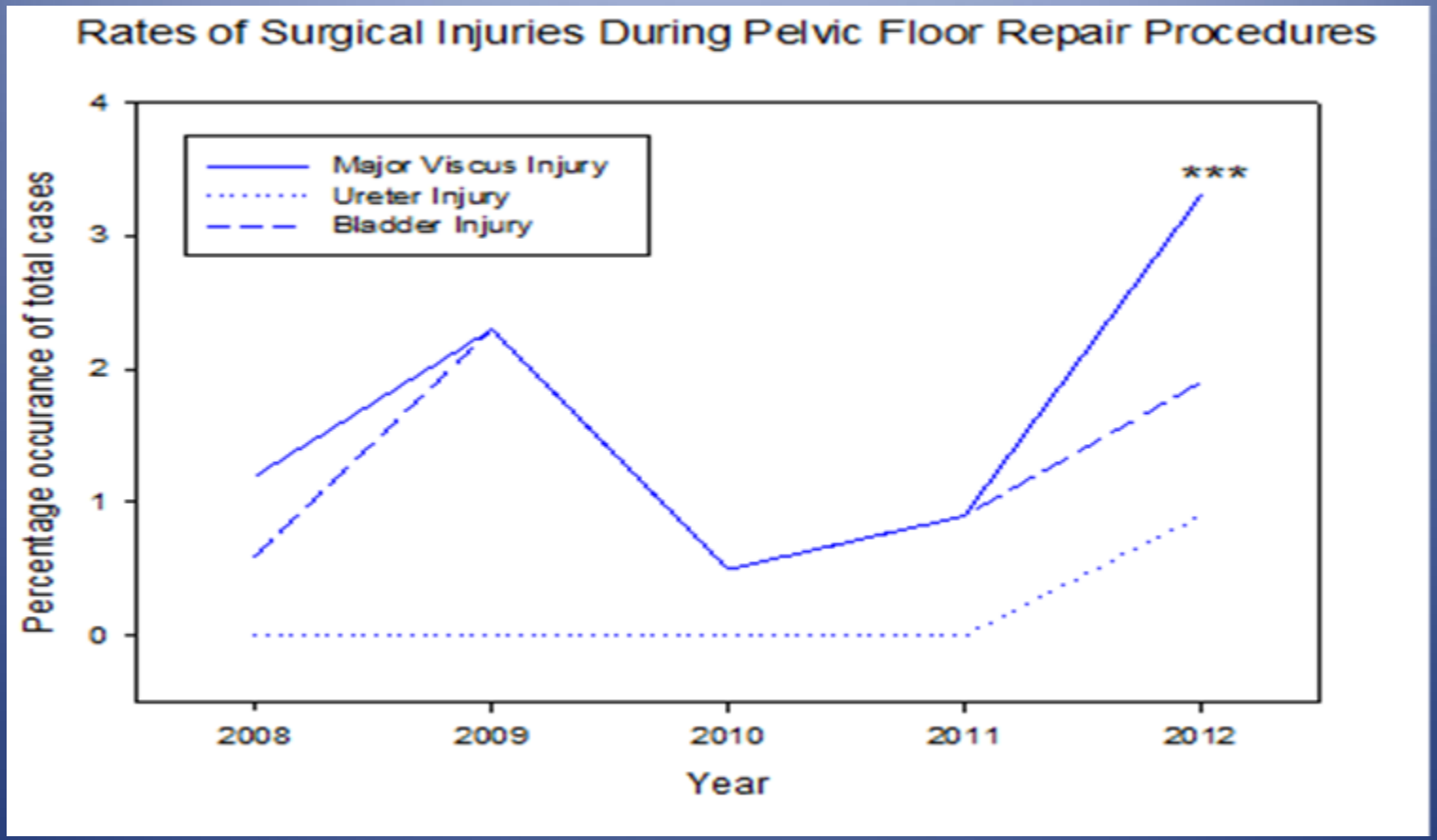
J&J Withdraw Vaginal Mesh Products From Market

FDA Issue Warning

80% Reduction in Vaginal Mesh Sales Worldwide

'CLASS ACTION' FOR MESH PRODUCTS DAMAGES COMMENCES

Casemix similar to 2011 and 2012

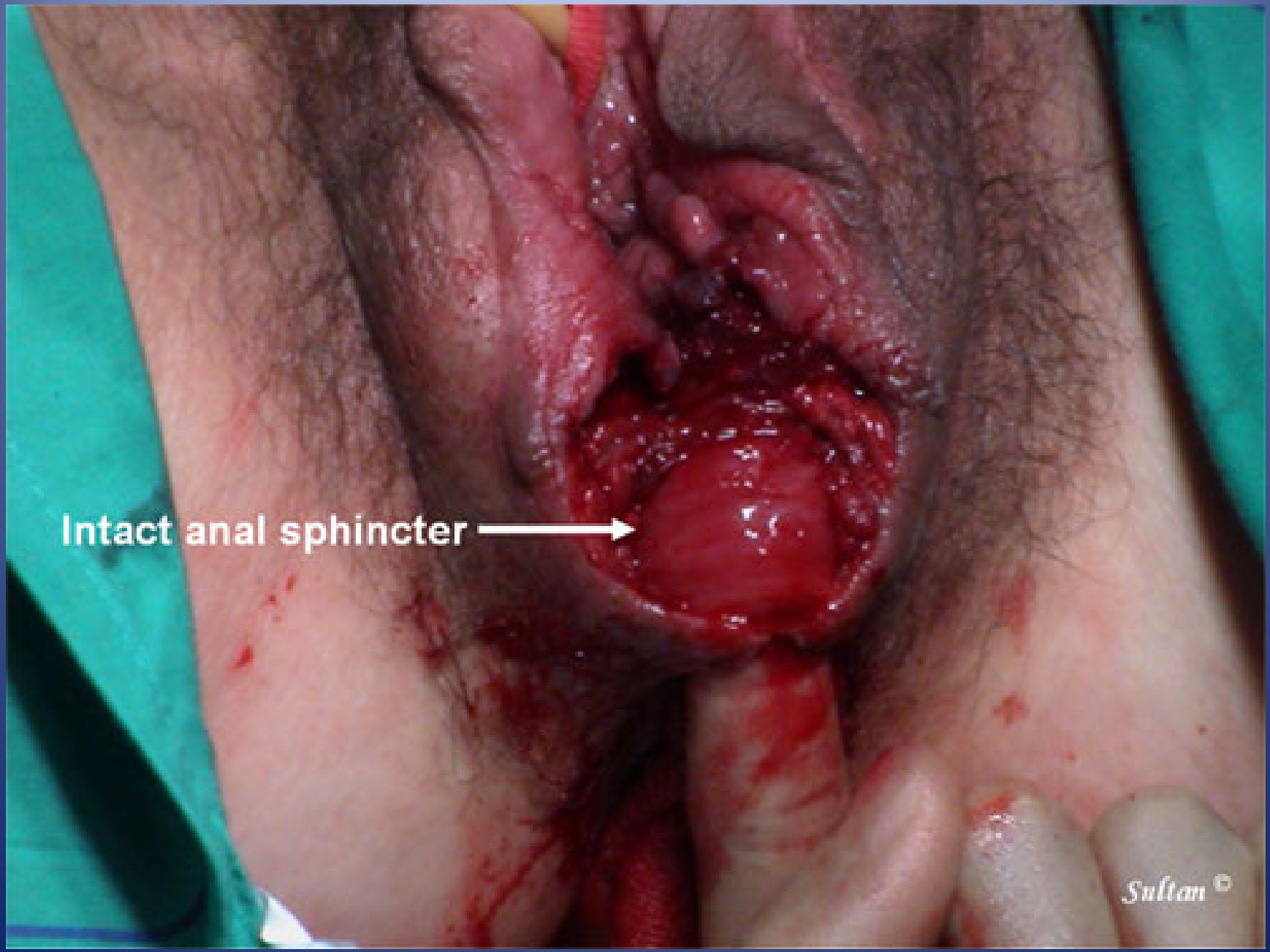


Intraoperative and up to 2 weeks post op complications 2012

- Total=3.3%=7
- 4 cystotomies
- 1 bowel perforation
- 2 ureters-kinked and recognised intra-op
- -obstructed during mesh excision
- needed reimplantation
- Repeat prolapse surgery and mesh excision difficult

Guidelines for credentialling to physicians for placement of transvaginal placement of surgical mesh for pelvic organ prolapse
AUGS 2013

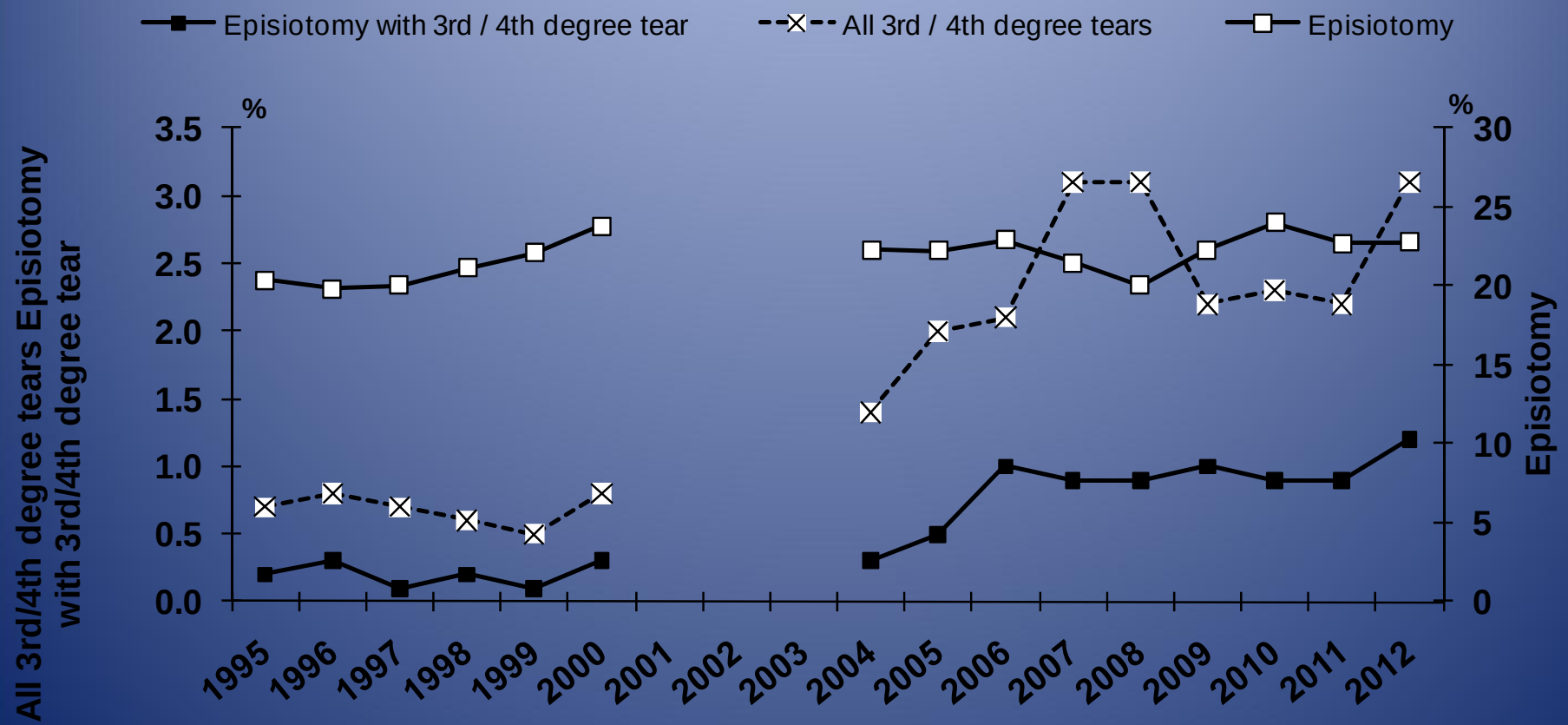
- For surgeons who currently perform transvaginal placement
- of surgical mesh for pelvic organ prolapse and wish to
- maintain this privilege:
- a) Continuing medical education in female pelvic reconstructive
- surgery should be documented annually
- b) A minimum of 30 surgical cases for pelvic organ prolapse
- (any route, with or without transvaginal mesh) be
- performed each year
- c) Demonstrate experience and privileges in non-mesh
- vaginal repair of prolapse including anterior colporrhaphy,
- posterior colporrhaphy, and vaginal colpopexy
- (eg, uterosacral or sacrospinous ligament fixation), and
- experience and privileges to perform intraoperative cystoscopy
- to evaluate for bladder and ureteral integrity
- d) Annual internal audits should be performed
- e) Prior to adoption of a new transvaginal mesh technology
- or device, specific knowledge of the new procedure
- should be demonstrated as previously described and the
- surgeon should be proctored on no fewer than 5 procedures
- or as many as is necessary to demonstrate that they
- can independently perform the newly adopted procedure


Intact anal sphincter
Sultan ©

OASIS risk factors

- Steady increase in incidence worldwide (range 0.3-11%)
- Primiparity
- Instrumental delivery
- Fetal macrosomia
- Prolonged second stage of labour
- OP position
- Episiotomy?
- Increased detection=increased awareness?

OASIS NWH 2012



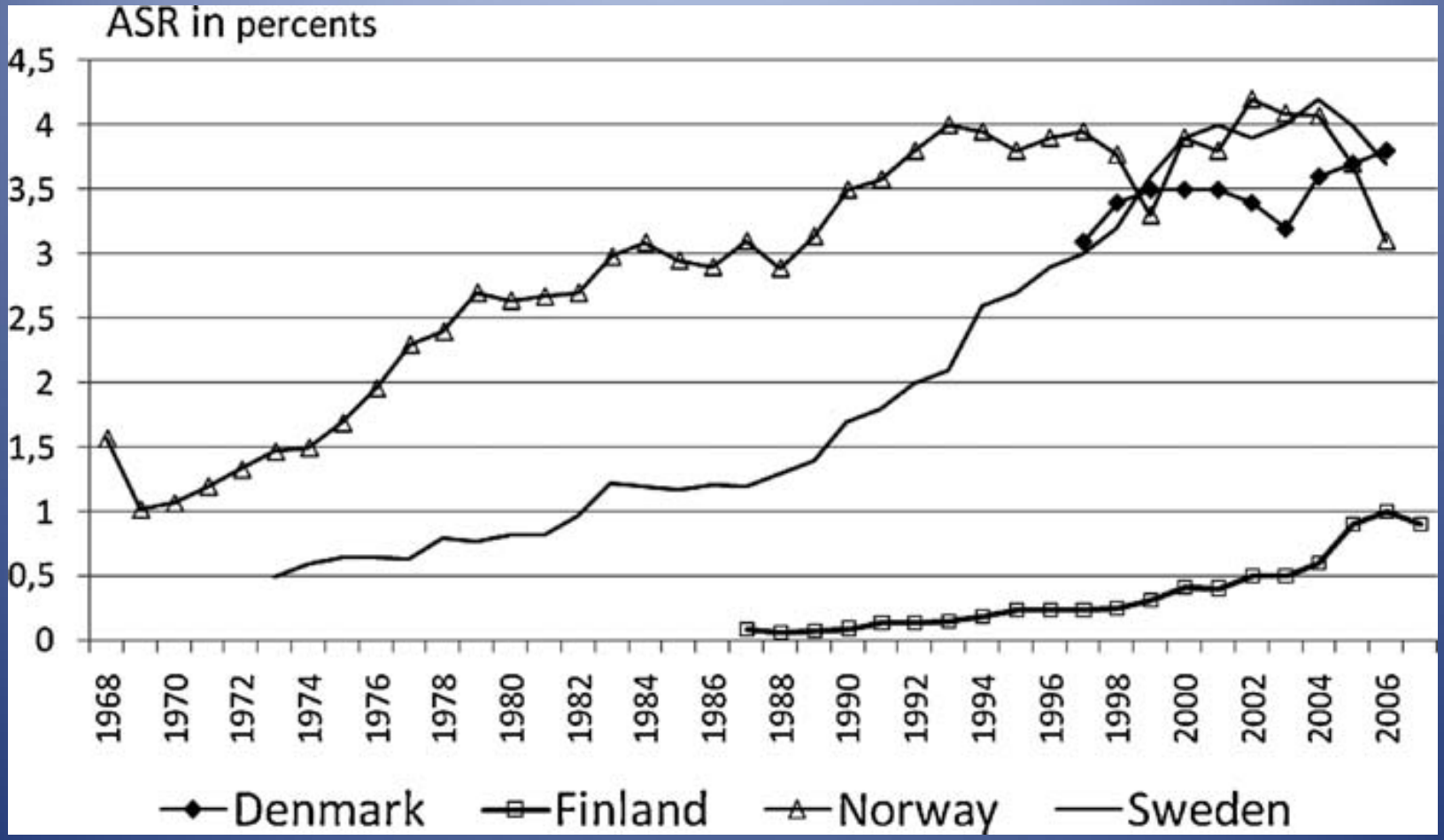


Fig. 1. Incidence of anal sphincter tear is presented as percentages of all vaginal deliveries, including spontaneous and instrumental deliveries.

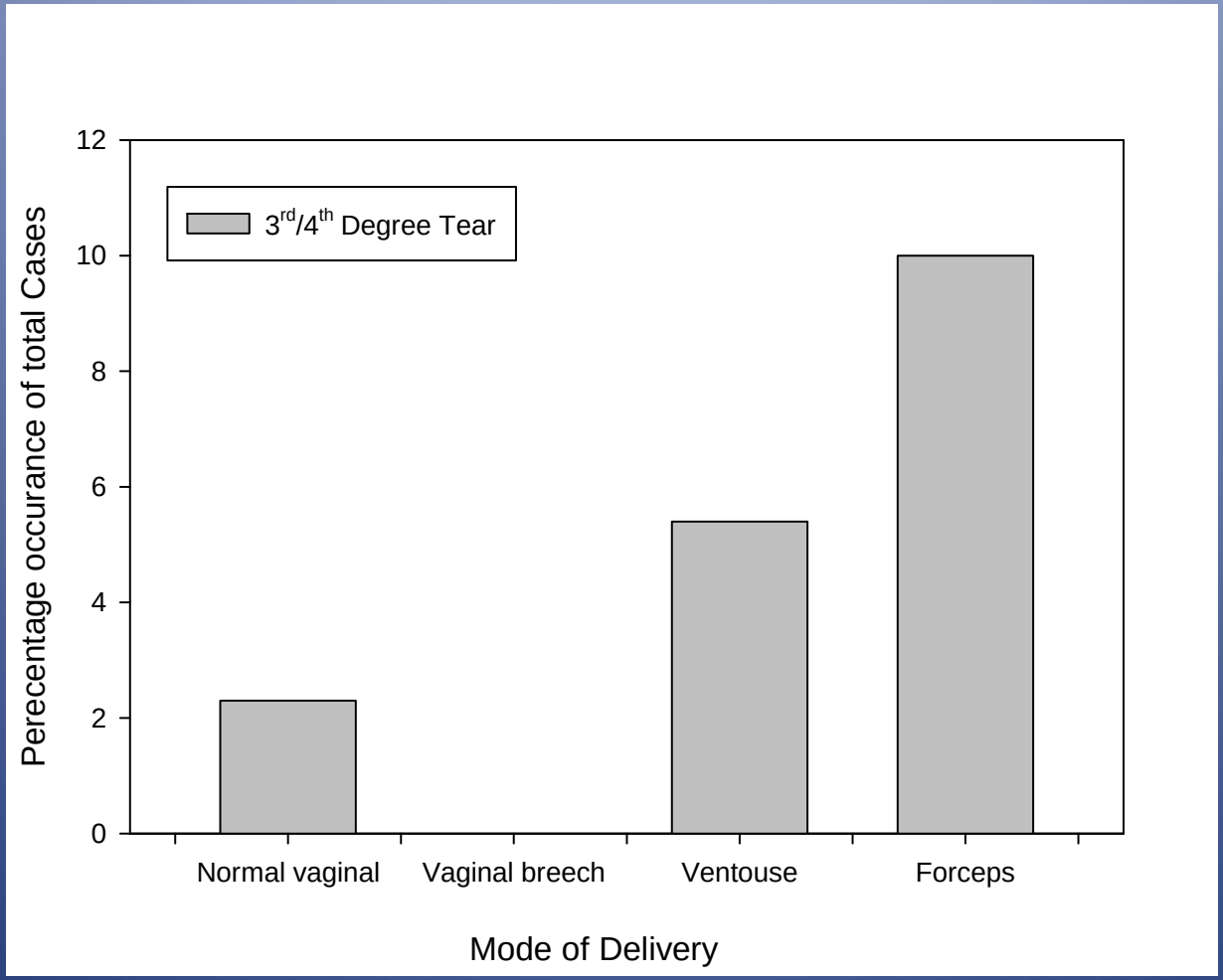
Practices expected to help reduce incidence

Ventouse vs forceps

Use of episiotomy

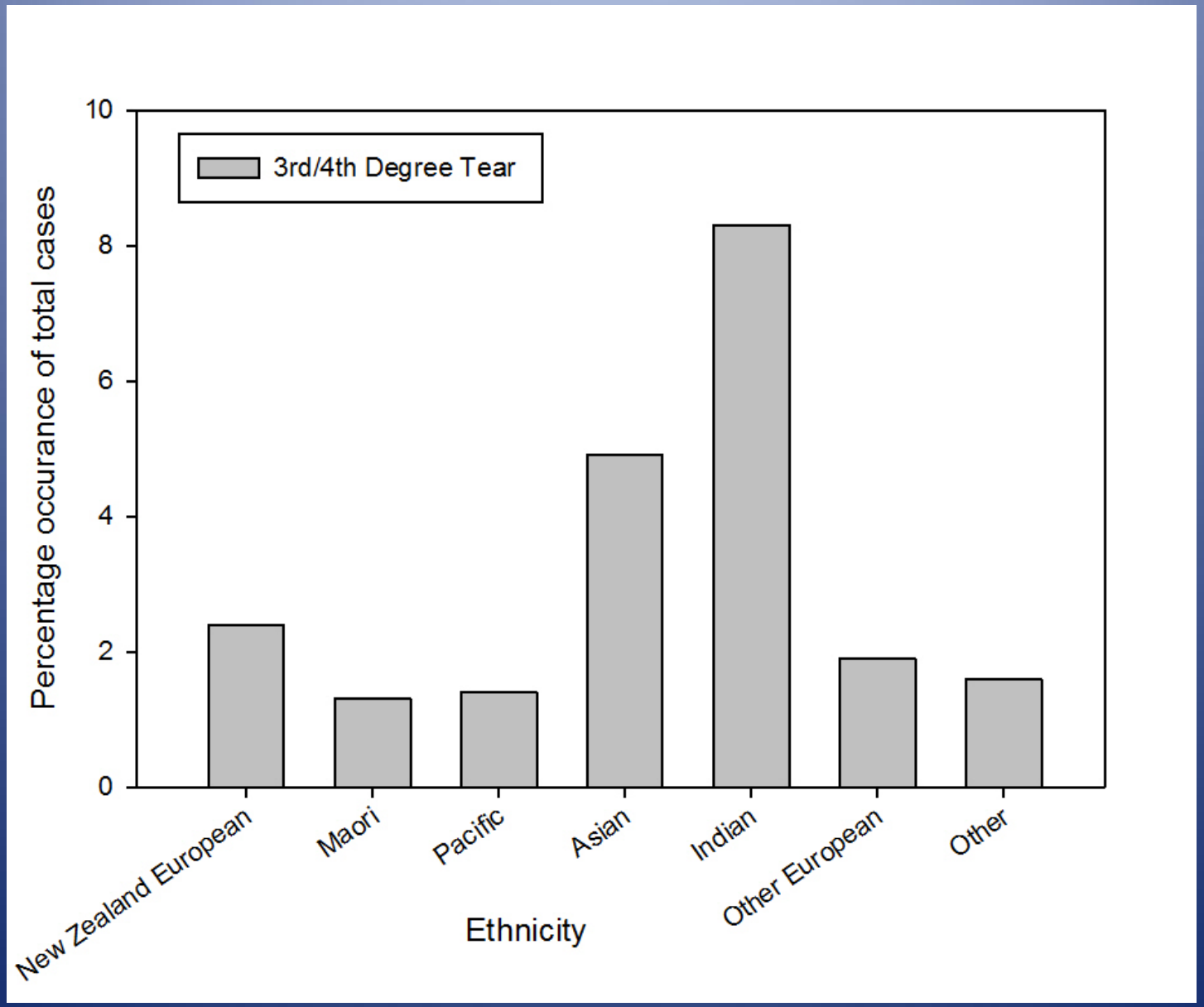
“Hands on” v “hands poised” delivery technique

Perineal trauma by mode of birth, parity and LMC at birth among all vaginal births NWH 2012



- One in 10 women having a forceps delivery have an OASIS injury recognised.
- informed consent?

NWH Ethnicity OASIS 2013



NWH 2012

- 22 Indian women delivered with forceps
- 6 had OASIS
- 22/6=3.7

- 1 in 3.7 Indian women having forceps delivery had OASIS recognised.

WARNING
Do you REALLY want to use these?

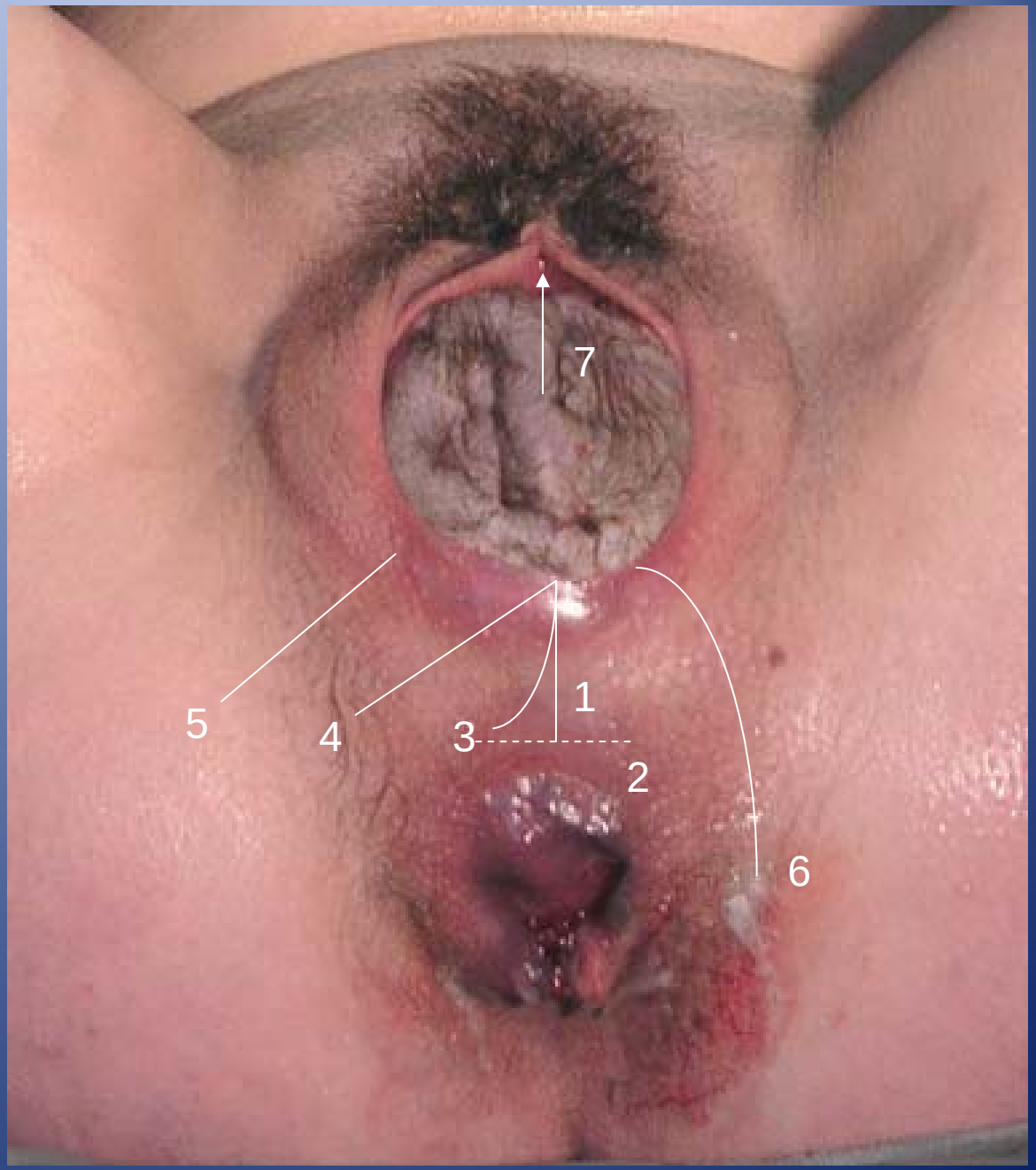
Frequency of factors describing deliveries over the years in four Nordic countries.

	Denmark	Finland	Norway	Sweden
Primiparous women				
1975	45%	a	43%	46%
1987	47%	40%	44%	42%
1995	45%	39%	41%	40%
2005	45%	43%	41%	44%
Mean maternal age, years				
1975	26.4	26.4	25.5	26.2
1985	27.7	28.6	26.9	28.0
1995	29.2	29.7	28.3	28.8
2005	30.7	30.0	29.7	30.3
Episiotomy				
1975	a	a	a	21%
1985	a	a	a	16%
1997	13%	42%	a	8%
1999	10%	43%	20%	9%
2000	10%	a	20%	9%
2005	7%	30%	14%	7%
Ventouse delivery				
1975	a	a	3%	5%
1987	a	4%	4%	6%
1997	8%	5%	6%	8%
2005	8%	7%	7%	9%

	Denmark	Finland	Norway	Sweden
Caesarean sections				
1975	6%	8%	4%	8%
1985	13%	15%	12%	12%
1995	13%	16%	12%	12%
2005	20%	17%	16%	17%
Mean infant birth weight in grams				
1975	3340	A	3481	3462
1987	3402	3558	3499	3487
1995	3473	3547	3540	3521
2004	3485	3518	3533	3530
Macrosomia (_4000 g)				
1975	10%	a	16%	16%
1987	15%	20%	18%	17%
1995	19%	20%	21%	19%
2005	19%	18%	20%	19%
Macrosomia (_4500 g)				
1975	2%	a	3%	3%
1987	2%	4%	3%	3%
1995	4%	4%	4%	4%
2005	4%	3%	4%	4%

a Information not available.

. Types of episiotomy.
1: median episiotomy,
2: modified median episiotomy,
3: ‘J’-shaped episiotomy,
4: mediolateral episiotomy,
5: lateral episiotomy,
6: radical lateral (Schuchardt incision),
7: anterior episiotomy



Does the angle of episiotomy affect the incidence of anal sphincter injury?

- Angle of episiotomy
  - OASIS 30^0
  - Controls 38^0 $P < 0.001$
  - 50% reduction in OASIS for every 6^0

Eogan. BJOG 2006

- OASIS 26º vs 37º p=0.01
  - No midwife and 22% doctors – true mediolateral

Andrews. Birth 2006

Conflicting results because of variation in actual position of cut?

- Usual angle recommended 45 degrees
- Observational data, retrospective register studies and case control studies- no RCTs
- Suggested angle of 60 degrees for definition of medio-lateral episiotomy for upcoming RCT(Kalis V et al Classification of episiotomy .BJOG 2012)

Perineal length and OASIS

- 1000 primips perineal length measured in first stage of labour.
- Results-caucasians=3.7+/-0.9cm
- Asians 3.5+/-0.9cm

- OASIS and perineal length less than 2.5cm associated with recurrent OASIS

2009 Dua et al Perineal length:norms in gravid women in the first stage of labour int urogynaecol J

- Hands on – Traditional technique to support the perineum involving gentle pressure on the head with one hand to slow delivery while supporting the perineum with the other hand using extended thumb and fingers and gently pushing perineum under baby's chin.
- Hands poised/off – hands prepared to put light pressure on the perineum in case of rapid expulsion but not to touch the perineum.

What is UK current practice?

Trochez R et al. HOOPS. Int Urogynaecol J (2011) 22:1279-1285.

- An observational postal questionaire study of 1000 midwives in the UK.
- 60% response – 607 questionaires returned.
- 299 (49%) - hands off, 48.6% hands on
- Majority of midwives had >5 years experience
- Less experienced MW preferred hands off (72% vs 41%)
- Higher proportion of MW in hands off group would never do an episiotomy for indications other than fetal distress. (37.1% vs 24.4%)

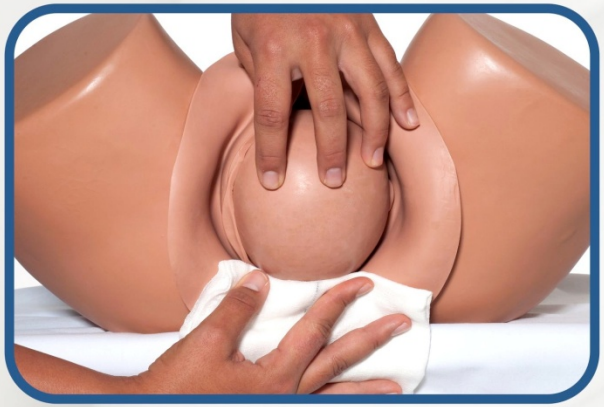
Perineal Audit 2012 - Effect of Spontaneous Vaginal Delivery on the Perineum in Primigravidae

At CMDHB our rates of third and fourth degree tears are increasing.
This begs the question - what are the factors involved in perineal injury?

This audit will help us understand more about perineal trauma in our population and how best we can minimise trauma to the anal sphincter complex.

At the time of delivery - please complete an audit form for all unassisted vaginal deliveries in primigravidae and place completed forms in the collection box. These audit forms are found in the clinical notes. Audit runs for 3 months from January 16th to April 30th 2012

Background - We are not isolated in this. A Scandinavian review (Norway, Sweden & Denmark) documented rates of 4-5% sphincter injury. Finland however, although their rate has increased, is much lower at 1.5%. A 7-year multi-centre interventional study in Norway had some highly significant results in decreasing their obstetric anal sphincter injury rates from 4-5% to 1-2%. *Elizabeth Hals et al. Multi-centre Interventional Program to reduce the incidence of anal sphincter tears. Obstetrical and Gynaecological Survey. Jan 2011 (66). Page 12-13*



Hands ON

Hands OFF

Perineal Audit: Effect of spontaneous Vaginal Delivery on the Perineum in Primagravidae

2012

Patient label			
Date		Ethnicity	
BMI		Gestation	
Birthweight (gm)		Birth presentation	
Duration of 2nd stage	Hr..... Min		
Delivery Type & position	NVD ☐ Episiotomy Yes ☐ No ☐ Recumbent ☐ Hands and knees ☐ Standing ☐ Other ☐		
Hands on hands off perineum?	Hands on – Guarding perineum ☐ – Head flexion ☐ Hands off ☐ Hands poised ☐ Comment/Complications:.....		
Degree of perineal tear	☐ Intact perineum ☐ 3rd degree ☐ 1st degree ☐ 4th degree ☐ 2nd degree		
Suturing	☐ Sutured ☐ Not sutured	Syntocinon	☐ Yes ☐ No
Labour Analgesic	Nil ☐ Entonox ☐ Pethidine☐ Epidural ☐ Hydro ☐ Other:		
Designation & level of Person responsible for delivery	Student Midwife ☐ Midwife <2 years ☐ 2-5 years Midwife ☐ Midwife > 5 years ☐ Student Doctor ☐ Registrar 1st year ☐ Registrar 2-4 years ☐ Registrar >4 years ☐ SMO < 5 years ☐ SMO > 5 years ☐		

For more information please contact
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Dr Jackie Smalldridge (*3159)

COUNTIES MANUKAU DISTRICT HEALTH BOARD
A Community Partnership

CMDHB (cont)

- **Hands-on-**
- Guarding the perineum=68%
- Head support 74%

- **Hands poised**-11%
- Hands off-3%

CMDHB (cont)

- Delivery attendants experience
- Midwives more than 5 years =55.9%
- Midwives 2-5 years=18.8%
- Midwives less than 2 years=18.4%
- Student midwives=7.35%

- Med students=0.8%
- Registrars=2.4%
- SMO’s=1.4%

2004 Norwegian Board of Health supervision investigated high rates of OASIS

- Criticism of units with high incidence
- Ordered to change the trend and provide better results and quality
- Started a national debate and initiated National strategy to reduce the incidence of OASIS

Norway:

Hals E et al. A multicenter interventional program o reduce the incidence of anal sphincter tears. Obstet Gynaecol oct 2010;116(4):901-908.

- Population based cohort study found their rates of OASIS between 1967 – 2004 had significantly increased from 0.5% - 4.1% in 2004.
- Interventional cohort study (2003-2009) incl 4 hospitals in Norway
- 40,152 vaginal deliveries included
- In the three years prior to the intervention study Norways rates of OASIS at the four hospitals were 4.68%, 4.75%, 4.98% and 3.68%.

Clinical intervention

1 Education of all staff re OASIS (2-3 day compulsory course)

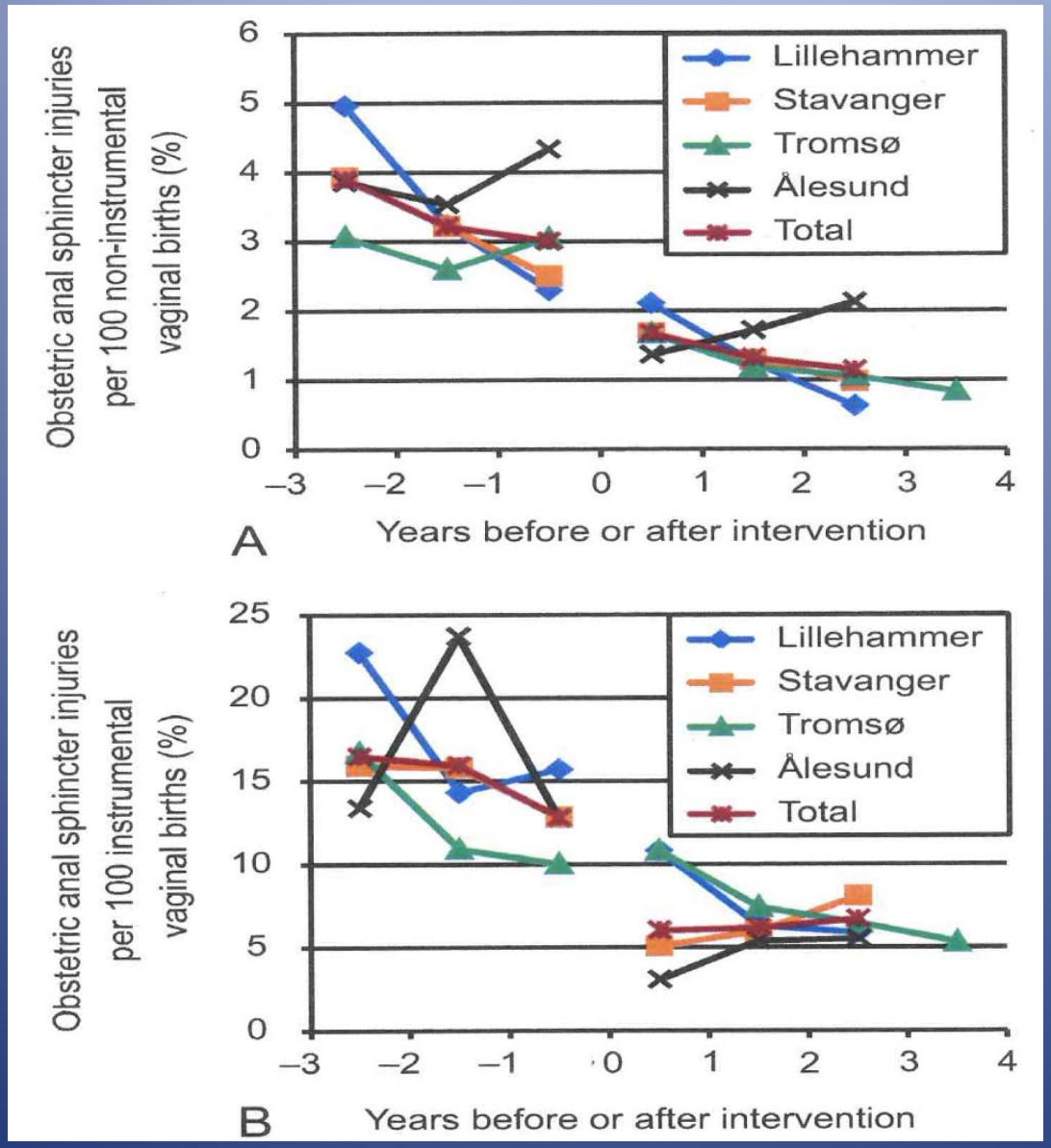
2. Reintroducing traditional methods of delivery-hands-on

3.Changing the position at birth to allow perineal manoeuvres to take place

4. More liberal use of episiotomy-lateral or mediolateral

Results:

- Highly significant reduction in OASIS rates from 4-5% to 1-2% in all hospitals.
- The lowest OASIS rates reported at the end of the intervention were 1.2% and 1.3%. These two hospitals with an unchanged episiotomy rate.


Obstetric anal sphincter injuries per 100 non-instrumental vaginal births (%)
6
5
4
3
2
1
0
–3
–2
–1
0
1
2
3
4
Lillehammer
Stavanger
Tromsø
Ålesund
Total
Years before or after intervention
A
Obstetric anal sphincter injuries per 100 instrumental vaginal births (%)
25
20
15
10
5
0
–3
–2
–1
0
1
2
3
4
Lillehammer
Stavanger
Tromsø
Ålesund
Total
Years before or after intervention
B

- Dramatic reduction in rates from 4-5% to 1-2%
- No change in the rates of instrumental deliveries in study period
- Increase in the rates of episiotomy (up to 25-30% from 10%)
- Conclusion-Changing practices around SVD can reduce OASIS rates significantly
- What can you do at ADHB?

- Change PMMRC to PMMMRC and include maternal morbidity too??